

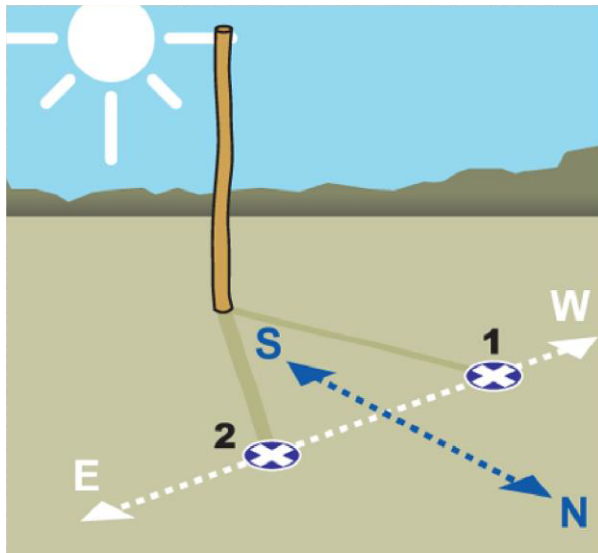
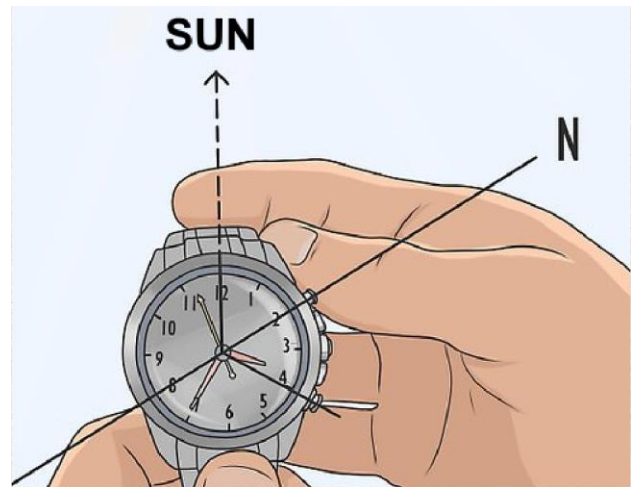
# pro plan chart 1

## NORTH WITHOUT A COMPASS

### DURING THE DAY:

#### **Analog Watch method:**

Point the 12 o'clock mark towards the sun if you're in the Southern Hemisphere. Then find the halfway mark between the hour hand and the 12 o'clock point to locate the north-south line. True north is the side pointing towards the sun



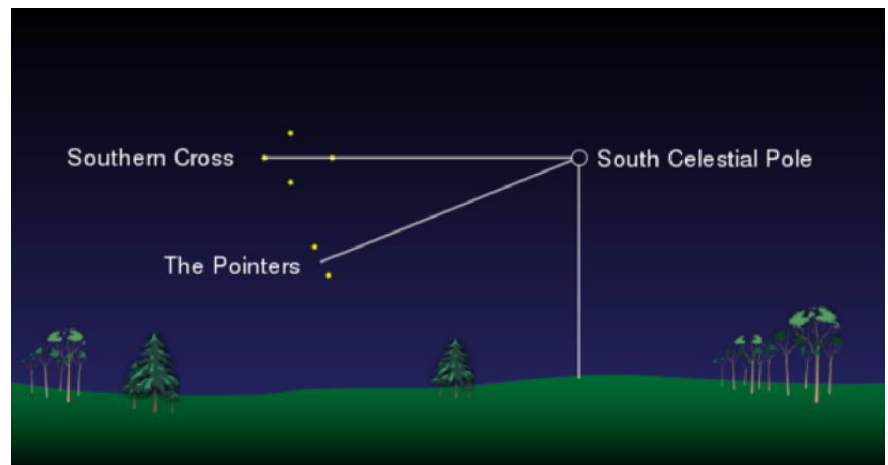
#### **Shadow Stick method:**

Use a stick in the ground and mark where the end of the shadow starts. Wait 15 to 20 minutes and mark the end of the shadow. Join the two marks with a line. The line between the marks is East - West and North will be 90 degrees to the line.

### AT NIGHT:

#### **Southern Cross:**

Extend the axis of the cross like the tail of a kite, then intersect with a line bisecting the two pointers.



The point where the lines intersect is very close to the South celestial pole where the earth's axis points into the southern sky. This pole is visible anywhere in the Southern hemisphere and lies directly south.